WHAT IS CLAIMED IS:

1. An articular cartilage graft (ACG) having osteoarthritic cartilage damage.

2. An articular cartilage graft (ACG) comprising an ACG treated with an amount of one or more cytokines effective to induce osteoarthritic cartilage damage in the ACG.

3. The ACG of claim 2 wherein the one or more cytokines are selected from the group consisting of IL-1α, IL-1β, and TNFα.

4. A method for making the articular cartilage graft of claim 1 comprising treating the ACG with an amount of one or more cytokines effective to induce the osteoarthritic cartilage damage.

5. An assay for evaluating the efficacy of a test compound for treating or preventing osteoarthritic cartilage damage comprising:

(a) treating an ACG with an osteoarthritic cartilage damage inducing compound;

(b) treating the ACG with a test compound; and

(c) comparing the change in the levels of one or more osteoarthritic markers in an ACG before and after administration of an osteoarthritic phenotype inducing composition alone with the change in the levels of the same markers in an ACG before and after administration of both the test compound and the osteoarthritic phenotype inducing composition; wherein a lower level of change in the ACG to which the test compound was

administered indicates that the test compound is efficacious for treating or preventing osteoarthritic cartilage damage.

6. The assay of claim 5 wherein the osteoarthritic cartilage damage inducing compound comprises one or more cytokines.

7. The assay of claim 6 wherein the one or more cytokines are selected from the group consisting of IL-1α, IL-1β, and TNFα.

8. The assay of claim 5 wherein the test compound is administered before the osteoarthritic phenotype inducing composition.

9. The assay of claim 5 wherein the test compound is administered after the osteoarthritic phenotype inducing composition.

10. The assay of claim 5 wherein the test compound and the osteoarthritic phenotype inducing composition are administered at the same time.

11. The assay of claim 5 wherein at least one osteoarthritic marker is a matrix protein.

12. The assay of claim 5 wherein the matrix protein is a collagen or a proteoglycan.

13. The assay of claim 11 wherein the matrix protein is type II collagen.

14. The assay of claim 11 wherein the matrix protein is aggrecan.

15. The assay of claim 5 wherein at least one osteoarthritic marker is a metalloproteinase.

16. The assay of claim 15 wherein the metalloproteinase protein is selected from the group consisting of collagenase 1, collagenase 3, aggrecanase 1, aggrecanase 2, and stromelysin.

17. The assay of claim 5 wherein at least one osteoarthritic marker is an inflammatory protein.

18. The assay of claim 17 wherein the inflammatory protein is selected from the group consisting of TNF, IL-6, IL-8, IL-1β, nitric oxide synthase 2A, prostaglandin-endoperoxidase synthase 2, or NF-κB.

19. The assay of claim 5 wherein the levels of the osteoarthritic markers are determined by RNA levels.

20. The assay of claim 19 wherein the RNA levels are determined by RT-PCR or Northern Blot.

21. The assay of claim 5 wherein the levels of the osteoarthritic markers are determined by protein levels.

22. The assay of claim 21 wherein the protein levels are determined by an assay selected from the group consisting of histology, Western blot, ELISA, and immunohistochemistry.

23. The assay of claim 5 wherein the protein levels of a matrix protein and the RNA levels of a metalloproteinase are determined in the same ACG.

24. The assay of claim 5 wherein the protein levels of a matrix protein and the RNA levels of an inflammatory molecule are determined in the same ACG.